

Bee Production Entrepreneurship SAE

Situation: *The following steps outline a student interested in raising and maintaining bee hives for pollination and or honey production, which potentially requires the investment of time and money to create income in 2024. Bee products would be part of an Ag Sales or Ag Processing separate SAE.*

SAE SETUP



Step 1 Set Up the SAE - PROFILE Tab

- Select Experience Manager - choose "Add New" to set up your SAE (see example to the right)
- Enter SAE Name - identify purposes such as hives, honey production, pollination services, etc.
- Select level of focus, typically individual, and SAE type
- Choose Category - Primary area and subcategory
- Management Module - Select Market/Replacement Manager (Optional) to maintain hives
- Hit "Save"




Name: Eddy Apiary - Mature Hives
Level: Individual
Type: Entrepreneurship
Area: Animal Systems

You may use the financial ledger without the Market Manager to enter hive/nuc purchases without managing quantity, as hives are a component of production and would not be considered a capital non-current asset or livestock purchased, but rather purchased as a supply.



Step 2 Develop Your SAE Plan - Experience Manager

- Click  Complete the five tabs using the help in the header box of each section
- Description Tab - Include project duration, size/kind, goals, evaluation, and mentor
- Time Tab - Include time required for feeding/watering, care, management, honey collection, or other everyday activities (hours per week)
- Financial Tab - List expected expenses and income and how they are secured (cash, non-cash, gift)
- Learning Objectives Tab - Click + Add Skills (select any 3 as a minimum requirement):



- FND.A1.05 - Developing an SAE plan
- AS.02.01 - Demonstrate management techniques that ensure animal welfare
- AS.03.01 - Analyze the nutritional needs of animals

Once 3 skills are selected, add a brief description of related activities that may occur in your project related to each learning outcome



Step 3 Create a Budget for your SAE - Experience Manager

- Enter estimated annual income(s) for one mature hive throughout the SAE
- Enter estimated annual expenses for one mature hive that can be endured in the SAE
- Use the Memo to show calculations or rationale for the estimate
- Non-cash income and all non-cash costs should be equal



Step 4 Enter Beginning Values - FINANCES Tab (SAE items on/before 1st day in Ag)

- Select Blue Box - "Start of Ag Ed Inventory" ****USE:** *Beginning Inventory Worksheet*
 - Current Items Tab - consumable supplies, hives/nucs IF purchased before 1st day in Ag
 - Non-Current Items Tab - Hive boxes, bee suits, vaporizers, etc
- **List only Non-Current items owned by the student (items not owned = use Custom Hire)**

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- Liabilities Tab - existing loans for your SAE project
- Cash/Checking Tab - Cash/savings account value before 1st day of Ag available for cash expenses in your SAE

SAE FINANCIALS Market Manager (tracks hives) or Financial Tab (w/o manager)

NOTE: Steps 5 - 9 will all be entered using the tabs inside the Market Manager

Step 5 Add New Animal(s) - FINANCES Tab



- Choose Market Manager
- Select the method of Purchase
 - Buy New Animal** - You use CASH for the Livestock (hives/swarms/nucs) Purchased
 - New Non-Cash Entry** - You trade LABOR in exchange for the Livestock Purchased

Enter: Date, Vendor, Livestock Purchased, Value, # Head, Weight (Memos for Non-Cash)

Choose an SAE to Manage: Eddy Apiary - Mature Hives											
Review Mgmt Entries		Review Feed Entries		New Cash Expense		New Non-Cash Entry		Non-Current Item Mgmt		Experience Manager	
<input type="checkbox"/>	Tag / Name	Purchase Info			Current Status			Sale Info			
<input type="checkbox"/>	July Swarm no queen Edit	Date	Buy New Animal	Location	New Herd Entry	New Animal Entry	Inventory Value	(Sell/Transfer)			
		8/7/2024 Edit					\$5				
		Weight (lbs)	Cost	Weight (lbs)	Days		Market Value				
			\$5.00		30		\$5				
		Total Cost	Active Head Count	Inventory Value			Market Value	Total Sales			
		\$5.00	1	\$5.00			\$5.00	\$0.00			

*If your swarm/hive came in as Beginning Inventory on 1st day of Ag, they will appear here without a required purchase

If using the financial ledger without the Market Manager, enter hive/nuc purchases, but rather as a supply.

Step 6 Record SAE Related Expenses

Cash Entries - SAE Cash Expenses

New Cash Expense

- Record date, vendor, SAE, and type of expense
- Examples: feed, queens, treatments, supplies

Non-Cash Entries - SAE Labor Exchange

New Non-Cash Entry

- Choose the SAE for income and expense to show trade of labor value (memo) for SAE expense and quantity (memo)
- Record date, vendor, value of exchanged labor/expense
- "Save and Journal" your time spent(labor) for the value of the expense

Cash Expenses



8/15/24 – Nature's Image Farm, \$40, Queen Bee 2024, (1 bag)

Non-Cash Expenses

6/1/24 – Labor exchange, \$40, (2) Varroa Easy Mite Check, 4 hrs. mulch work @ \$10/hr. exchange

If using the financial ledger without the Market Manager, enter these purchases using the Cash or Non-Cash entries in the Finance Tab.

Enter Date, Vendor, Experience, choose appropriate Expense Type, \$ Amount, and Memo/Quantity

- Other Non-Cash could be Gifts of supplies, or Non-SAE trade, which is your labor such as babysitting for supplies.

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Step 7 Record Animal/Cash Sale Info - Use Dropdown

Sale Info

- SELL - animal (hive) is sold as cash value \$/lb, hive lease
- DEATH LOSS - The hive dies before the end of the project
- Record a date, vendor, type, \$ value, memo (quantity)
- TRANSFER - if SAE is used for honey processing or sales, TRANSFER product to those SAE's



Also, enter any "Other Income/Premium" in FINANCE TAB (Cash Entries)

Cash Income

8/5/24 - lease 1 hive for orchard use, \$100

Non-Cash Income

8/10/24 - Used at Home, honey comb harvested, \$25

Step 8 Record/Manage Non-Current Items

Non-Current Item Mgmt



- Choose "Add New" for items purchased during the SAE beyond 1st day of Ag (Adult bee suit)
- Record "Usage" for each item to link SAE(s) for depreciation
- If you sell non-current items, choose "Sell" complete info

Non-Current Purchase

6/1/24 - Purchase Adult Bee Suit; \$120, 8yr life and \$100 salvage value. Usage = 100% for Eddy Apiary

Step 9 Herd/Animal Management

New Herd Entry

New Animal Entry

- Record herd or animal management tasks (hive treatment, harvest, etc.)
- Herd entry will apply to all animals in SAE; Animal will apply to an individual animal

**Not applicable if not using Market Manager

SAE REFLECTION



Step 10 Record Your SAE Time - JOURNAL Tab

- Use the mobile version or desktop to journal your time
- Enter the date, choose your SAE, and related skill area
- Enter the amount of time in your SAE (hour/minutes)
- The description should include decisions and outcomes



On 6/8/24 - 2 hrs. 30 min: Manage hive boxes, surrounding grass area

On 8/1/24 - 2 hrs.: check frames and manage insects



Step 11 Capture SAE Photos - JOURNAL Tab/Portfolio

- Use your phone to capture photos and upload them directly using m.theaet.com
- Add captions to tie to SAE reports and in FFA Awards transition
- Also, you can access and add files in your Experience Manager



Step 12 SAE Reflection - SAE Manager/Reflections

- Annual Summary - describe (1) your SAE duration and kind (2) SAE size/scope (# of hives, product, intent) (3) key outcomes of the year
- ADD Efficiency Factor measure and discuss the management or performance seen in the SAE

EXAMPLE:

- Efficiency: Lbs Honey Produced/Hive
- Beginning Level: Year = 2023 Level = 1.5 lbs/hive



2024: Annual Review Example
I started 2 hives in the spring of 2024 and was able to capture 2 additional swarms and successfully introduced queens in each and are now fully functioning.

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- Year Attained: Year = 2024 Level = 2.5 lbs/hive
- Description of Outcome: NOTE - each year has a box for description, BUT it will combine in the award
- ACTIVITY: I implemented a better hive nutritional and health plan that increased survivability and production. I added sugar water and implemented pest management, which improved hive performance.
- Enter supplies on hand that have value, and you can measure using "+ New Asset."
- *** This could include hives that roll over on 12/31 remaining on inventory (cash value or fair market value)*
- Review/enter non-current usage for all items.
- Learning Activities - Describe learning activities that support the planned skill in the SAE



Step 13 Determine Project Status - SAE Manager

- The project is active and "on" while the project is ongoing (Eddy Apiary)
- As soon as all hives in the project are sold, transferred, or used at home, mark the SAE inactive/"off" to let the record book know there is NO more current inventory



Step 14 Key SAE Reports - REPORTS Tab

- "Single SAE Experience Report"- summarizes THIS SAE project in one report
- "Profit/Loss Report"- summarizes annual income and expenses
- "Complete Record Book Report-" summarizes all of your records into one report